GSHWG and AAWG Report to ARAC

March 28, 2001

Amos Hoggard

Boeing Commercial Airplane Group

Discussion Issues

- GSHWG Membership
- GSHWG Status Report
- AAWG Membership
- AAWG Status Report

GSHWG Membership

Collins, Richard Bayon de Noyer, P.

→ Eastin, Bob Doeland, Wim Comino, Giorgio

Newman, Philip Martin, Rory Kasowski, Andy Hoggard, Amos

Pereira, Humberto Reid, Mike Pinsard, Laurent

Yarges, Rich Smith, Johnny Simmons, Frank Schmidt, Hans

Dassault Aviation

CAA, UK

Aerospace

DGAC

EADS Airbus GmbH

Raytheon Corp Gulfstream

BAE Systems

Transport Canada

FAA US RLD, Netherlands

Cessna Boeing (CHAIR)

Bombardier

Embraer

Gulfstream

FAA, US

rich.yarges@faa.gov

33-5 56-13-92-51 jean-yves.beaufils@airbus.aeromatra.com

cominog@tc.gc.ca richard.collins@bae.co.uk

wim.doeland@rld.minvenw.nl

akasowski@cessna.textron.com amos.hoggardjr@west.boeing.com Robert.eastin@faa.gov

rory.martin@srg.caa.co.uk

philip.newman@eng.canadair.ca

johnny.smith@rac.ray.com pinsard_laurent@sfact.dgac.fr Humberto.pereira@embraer.com.br Frank.simmons.iii@gulfaero.com hans.schmidt@airbus.dasa.de mike.reid@gulfaero.com

Harmonization Working Group General Structures

- General Status Report
- Administrative Issues
- FAR 25.571 Status/Schedule

FAR 25.365(d) Work Plan and Schedule

- FAR 25.631 Status
- FAR 25.683 Work Plan and Schedule

General Status Report

General Structures HWG Status Report

March 2001

*Legal | *Economics |

) iii	regai	Economics /	Report	Status Since Last Report
Published:					
Scatter Factor	25.571	NR	NR.	NR.	HWG Work Complete - 1000
At FAA for Publication:					`
Material Strength	25.613	Complete	Complete	NR	HWG Re-reviewing
Properties and Design		•		:	Froncisco
Values					רכייי
At FAA for Evaluation:					
Proof of Structure	25.307	Complete	Complete	Complete	HWG Work Complete
Materials	25.603	Complete	Complete	Complete	HWG Work Complete
Casting Factors	25.621	Complete	Complete	Complete	HWG Work Complete
Windshields and Windows	25.775 d	In Work	NR.	Complete	HWG Work Complete
Doors	25.783	Complete	Complete	NR.	HWG Work Complete
Fuel Tank Access Covers	25.963 e/g	Complete	Complete	Complete	HWG Work Complete**
To Be Submitted to FAA:					
In HWG:					
High Altitude Flight	25.365(d)	Not Started	Not Started	Not started	in Work
Birdstrike	25.631, 25.775	Under	Under	NR.	Reviewing FAA R&D
	b, 25.571 e	review	review		
Fatigue and Damage	25.571	In Work	In Work	NR	in Work
- Clei al Ce					
* Declining	25.683	In Work	NR	Complete	AC In Work
" Preliminary				,	

28 March 2001 the word of the states

GSHWG/AAWG REPORT TO TAEIG

S

^{**} Additional considerations possible following recent Paris Accident.

Home of Randent atter

Administrative Issues

JAA Support of the GSHWG Activity

- October 2000 Meeting, GSHWG 2001 Meeting Schedule set
- Feb 12-16, 2001 Savannah GA
- April 23-27, 2001 Wichita KS
- June 18-22, 2001 Toulouse FR
- October 8-12 Hamburg GR
- December 10-14, 2001 Seattle WA
- December 2000, GSHWG Agreed each meeting to last five days
- February 2001, JAA changed position now could support only a 3.5 day meeting. 68 7% of action dim
- Travel Budge

 That have four Family Issues Travel Budget

Administrative Issues Con't

In 1998, the GSHWG submitted 25.613 for FAA review and publication.

Last month we started receiving inquiries old numbers were still accurate from the economist asking if our three year

It's really tough to run a railroad like this!

FAR 25.365(d) - High Altitude

AVIATION RULEMAKING ADVISORY COMMITTEE WORKING GROUP STATUS FORM

Date: 3/28/01

Parent Issue Group

ARAC - Transport Airplane and Engines Issues Group

Working Group Name

Structures General Harmonization Working Group

Harmonization Number (If Applicable) High Altitude Flight, 25.365(d), AC 25-20 Para 8

Task Description

Review 14 CFR 25.365(d), in particular the factors applied to the maximum relief value setting, which is used to set a limit structural design loan (load). Review FAA and Joint Aviation Authority (JAA) advisory material and paragraph 8 of Advisory Circular 26-20. In light of this review, develop a report recommending changes to harmonize this section and the corresponding JAR paragraphs, recommending new harmonization standards, and develop related or revised advisory material as

Product:

NPRM × ò × Other

ı		1	_	_	_	_	1	_		_	_	_	_	
	PUBLISH FINAL		PUBLISH NOTICE	RECOMMEND TO FAA	RECOMMEND TO ARAC (ISSUE CECIEVY	COMPLETION OF ECON-LEGAL BENJEW	REQUEST ECON-LEGAL REVIEW	DRAFT OF BROKEING SUPPORT) () (TECHNICAL ACREE	WCRR PLAN APPROVAL	COLIGHED	TACKING DIED COLOR	SCHEDING
2" Otr 2004	WI 7003	379 0100	July 2002	June 2002	May 2002		December 2001	000000 COOL	October 2004	March 2001			FORECAST	
									18101 200		October 2000	002755	COMB	
					•		_						4	

Status:

Working Group has developed a list of technical areas where agreement is needed. There is, in addition, a collateral tasking in 25.841 that affects this activity. Some of our work will depend on how that tasking is approached. The Mechanical Controls Working Group Chair has been approached to determine the best way to interface.

Next Action: TAEIG Acceptance of approach

Future Meetings: Wichita KS, April 2001

28 March 2001

GSHWG/AAWG REPORT TO TAEIG

FAR 25.571 Damage Tolerance

1	3
ı	-
L	. 7
15	
10	•
ĬŤ	גו
IÇ	C
12	1
Ιz	'n
โด	Z
ľ	3
I Q	
עו	
lõ	Z
ı۲	0
17	
Ľ	Þ
S	
IJ	<
12	7
I٦	×
IC	\overline{a}
S	Ŋ
l۳	≺
١٣	0
IΥ	X
۱4	¥
S	≤
WORKING GROUP STATUS FORM	A TON AUCEMAKING ADVISORY COMMITTE
ŀ	Ī
1	J
ı	_

Parent Issue Group

ARAC - Transport Airplane and Engines Issues Group

Date: 3/28/01

Task Title Working Group Name

Structures General Harmonization Working Group Fatigue and Damage Tolerance 25.571

Harmonization Number (If Applicable)

Task Description:

Develop a harmonized 25.571 rule and advisory material. NPRM AC. Other

_		3 - Qtr 2002	
			TOBLISH FINAL
_		2" Otr 2002	
		- 2002	PUBLISH NOTICE
,		101 0000	CECOMMEND TO FAA
_		December 2001	BECOME TO STORY (1880E GROUT)
		3 Or 2001	RECOMMEND TO ABAC (ISSUE CONTINUED)
		200	COMPLETION OF ECON-LEGAL REVIEW
			THE CHOICE CONTENSES
		2 Quarter 2001	REOLEST ECON - FO
-	ARRI JENBUY	S no	URAFT OF PRODUCT REVIEW
_	A	August 1999	DAYNO TO THIRT OF ANY OF
	Rev. March 1998		Respening due to Amat Sa
	October 1997		REQUEST DRAFTING SUPPORT
_	Ouly last		- FCHNICAL AGREEMENT-
-	111111111111111111111111111111111111111		
_	COMPLETE	- 0750	WORK PLAN APPROVAL
ı		EOBECAST	SCHEDULE

Status:

HWG Technical Agreement was reached March 1998. FAA published Amendment 25-96 and AC in March 1998. The harmonized preamble has been revised in light of the new rule. HWG has reconsidered the status of it's work and has agreed to reopen the harmonization effort in light of Amdt 96 and the work of the AAWG and FAA/Industries desire to re-instate fail-

safe requirements. Estimate of work package to be submitted

Next Action:

Future Meetings:

28 March 2001

FAR 25.631 Bird Strike

AVIATION RULEMAKING ADVISORY COMMITTEE WORKING GROUP STATUS FORM

Date: 3/28/01

Parent Issue Group

ARAC - Transport Airplane and Engines issues Group

Working Group Name

Structures General Harmonization Working Group

Birdstrike Damage

Harmonization Number (If Applicable) 17

Task Description

Develop new or revised requirements for the evaluation of transport category airplane structure for in-flight collision with a bird, including the size of the bird and the location of impact on the airplane (FAR 25.571, 25. 631, 25.775, and other conforming changes).

ZPRM_ <u>გ</u> ×

SCHEDULE	FORECAST	COMBLETE
WORK PLAN APPROVAL		February 1994
TECHNICAL AGREEMENT-		October 1004
REQUEST DRAFTING SUPPORT		000000
DRAFT OF PRODUCT REVIEW-		111V 7 1006
REQUEST ECON-LEGAL REVIEW		outy 7, 1990
ASSIST FAA IN COMPLETION OF UIUC	Jan 2002	
R&D PROGRAM		
REASSESS TECHNICAL POSITION AND	April 2002 /	
SET COURSE OF ACTION		
ECON-LEGAL REVIEW	June 2002	
COMPLETION OF ECON-LEGAL REVIEW	Sept 2002	
RECOMMEND TO ARAC (ISSUE GROUP)	December 2002	
RECOMMEND TO FAA	First Otr 2003	
PUBLISH NOTICE	3rd Otr 2003	
PUBLISH FINAL	3rd Otr 2004	

Status: FAA/JAA position on Bird Weight has been published, FAA is currently involved with UIUC in an R&D program to develop bird populations and probability of airplane/bird encounters. Industry has agreed to assist.

Next Action: Waiting for results of the FAA sponsored R&D program

Future Meetings: As necessary

28 March 2001

GSHWG/AAWG REPORT TO TAEIG

FAR 25.683 - Operational Tests

AVIATION RULEMAKING ADVISORY COMMITTEE WORKING GROUP STATUS FORM

Date: 3/28/01

Parent Issue Group ARAC - Transport Airplane and Engines

Issues Group

Structures General Harmonization Working Group

Operational Tests, 25.683

Working Group Name

Harmonization Number (If Applicable)

report.

Task Description: Develop advisory material for enveloped per fast track

NPRM AC Other

Product:

	4 th Qtr 2003	PUBLISH FINAL
	4"" Qtr 2002	DID IS TO ICE
	3 ¹⁶ Qtr 2002	DIECONINEND TO FAX
	3 rd Qtr 2002	RECOMMEND TO FAAC (ISSUE GROUP)
	2 rd Qtr 2002	BECOMPLETION OF LEGAL REVIEW
	January 2002	REQUEST LEGAL REVIEW
	10000	DRAFT OF PRODUCT REVIEW.
	1000	REQUEST DRAFTING SUPPORT
	October 2001	TECHNICAL AGREEMENT-
	April 2001	ESTABLISH SPECIALIST SUB-TEAM
December 2000		WORK TEAN ATTROVAL
COMPLETE	FORECAST	SCHEDOLE

assign the responsibility to this group of individuals to come HWG has determined that a sub group of specialists is required to establish the advisory material. The HWG will

Status:

Next Action: TAEIG approval of approach

up with the required AC material.

Future Meetings: Wichita, April 2001

Proposed Sub-Team Membership for AC 25.683

Cessna – Andy Kasowski Airbus - Traverse Boeing Raytheon CAA-UK DGAC CAA-NL FAA - Greg Schneider

TC - John Melo

	NAME	Member	E-Mail Address
Baker	Dorenda	N O	dorenda.baker@faa.dot.gov
Bandley	Brent	YES	brent.bandley@faa.gov
Bristow	John	YES	john bristow@srg.caa.co.uk
Carter	Aubrey(Co-Chair)	YES	aubrey.carter@delta-air.com
Coile	Mark	NO O	
Collier	Don	YES	dcollier@air-transport.org
Fenwick	Linsay	YES	fenwicki@alpa.org
Foucault	Jim .	YES	air2if@air.ups.com
Gaillardon	Jean-Michel	YES	iean michel gaillardon@airbus fr
Harrison	Bruce	YES	bruce.harrison@nwa.com
Heath	David	YES	david.heath@evergreenaviation.com
Petrakis	John	YES	john.petrakis@faa.gov
Hoggard	Amos	N O	amos.hoggardir@west.boeing.com
Johnson	Brian	NO.	brian.johnson6@PSS.boeing.com
Knegt	Martin	YES	martin.knegt@fokkerservices.storkgroup.com
Kuchıran	David	YES	dkuchi@coair.com
Goranson	U.F	N O	ulf.goranson@PSS.boeing.com
Lewis	Austin	YES	austin.lewis@bae.co.uk
Lotterer	Dave	YES	david.lotterer@dc.sba.com
Martin	Gary	YES	gary.martin@americawest.com
Gopinath	Kyatsandra (Co-Chair)	YES	jack.mcguire@PSS.boeing.com
ledford	Gareth	YES	Gareth. 1. tedford@britiah-airways.com
Oberdick	Jon	YES	jober@usairways.com
Pervorse	John .	N O	john.pervorse@west.boeing.com
Phillips	Randy	YES	randy_phillips@amrcorp.com
Ayers	Andy	YES	andy.k.ayers@lmco.com
Sesny	Paul	YES	paul.sesny@ual.com
Sobeck	Fred	YES	frederick.sobeck@faa.gov
Walder	Ray	YES	walderr@iata.org
Yerger	Mark	YES	mdyerger@fedex.com

Airworthiness Assurance Working Group

- Chairperson Changes
- December, 1999 Tasking WFD
- March 22, 2001 Tasking RE: Multiple Complex STCs

Chairperson Changes

- In September 2000, the Chairpersons of the AAWG changed.
- Kyatsandra Gopinath (Boeing) accepted the cochair spot vacated by Jack McGuire (Boeing)
- Aubrey Carter (Delta Air Lines) accepted the co-chair spot vacated by Jim Foucault (UPS)

December 1999 Tasking RE: WFD

- Assessments Status - At FAA for Final Legal/Economic
- Legal Assessment All Reports Look Positive
- Economic Assessment
- First two evaluations failed
- Third evaluation shows some promise

WFD Tasking Continued

- document at this meeting, Because of AAWG had hoped to present a final delayed until the June meeting. economic eval difficulties, this will be
- It is estimated that this will not affect the been working to. overall time line that the FAA/Industry has

about this at the next meeting. We will be much better prepared to talk